# Science and Technology Action Plan, 2005

Vision:
Innovation will drive a globally competitive economy in Maine



### Innovation

- Higher per-capita incomes
- Competitive industries
- Broad-based prosperity
- Better standards of living

The fundamental impulse that sets and keeps the capitalist engine in motion comes from the new consumers, goods, the new methods of production or transportation, the new markets, the new forms of industrial organization that capitalist enterprise creates...

--Joseph Schumpeter, Capitalism, Socialism and Democracy 1942

# Maine Science and Technology Advisory Council

- Representative from all technology sectors and R,D&C spectrum
- Develop State S&T plan
- Recommend funding levels to Gov (GF and Bond)
- Encourage inter-institutional and interdisciplinary collaborations
- Serve as state EPSCoR Committee

### R&D activity fuels Innovation

Goal:

\$1 billion in R&D activity by 2010

3% of GSP (the national average)
75% from private sector activity



## 5 Key Objectives

- 1. Maine's investments in R&D will stimulate and sustain consistent, competitive growth for Maine's economy.
- 2. Maine will boost academic R&D capacity; develop an educated, technically skilled workforce; broaden the impact from the nonprofit research institutions; and increase private sector R&D activity in key strategic areas important to Maine.
- 3. Maine's legislature and key policy makers recognize, advance and celebrate Maine's R&D investments and strategic priorities.
- 4. Using Maine's unique R&D assets and their significance to Maine's economy, the state will attract new business and investment.
- 5. Maine will foster growth in research intensive companies to become world-class enterprises through a comprehensive network of services and support.

# Maine's investments in R&D will stimulate and sustain consistent, competitive growth for Maine's economy.

#### **2010 OUTCOME:**

State investment in R&D reaches \$120 million per year, is focused on key strategic areas with the best potential to benefit Maine, and contains a state-sponsored R&D Seed Fund for emerging ideas and collaborative proposal development.

#### **2007 BENCHMARKS:**

State investment in R&D tops \$75 million annually, including \$35 million in on-going general fund support and \$40 million in bonds for infrastructure development and expansion.

Key strategic areas for targeted investments are defined and an objective process created to make funding recommendations for budget and bond initiatives.

Maine will boost academic R&D capacity; develop an educated, technically skilled workforce; broaden the impact from the nonprofit research institutions; and increase private sector R&D activity in key strategic areas important to Maine.

#### **2010 OUTCOME:**

#### R&D activity:

- 75% (\$750,000,000) from the private sector
- 25% (\$250,000,000) from universities and research institutions

#### **2007 BENCHMARKS:**

- Award 250 graduate degrees in science and engineering,
- Support 2000 faculty and non-faculty principal investigation
- Attract over \$150,000,000 in research funding.

Maine's legislature and key policy makers recognize, advance and celebrate Maine's R&D investments and strategic priorities.

#### **2010 OUTCOME:**

Strategic areas and proposals from MSTAC are a key component of the Governor's and Legislature's budget and bond proposals.

#### **2007 BENCHMARKS:**

A minimum of 30 key legislators articulate, champion and endorse the R&D strategies.

The Innovation Index and R&D Evaluation results are presented to a minimum of 30 key legislators and leadership staffers.

Using Maine's unique R&D assets and their significance to Maine's economy, the state will attract new business and investment.

#### **2010 OUTCOME:**

Location and/or expansion of 8 new research-intensive businesses in Maine.

#### **2007 BENCHMARKS:**

- Maine's graduating college and university seniors and alumni learn and routinely inquire about the state's burgeoning R&D enterprise.
- Attendance at ME Tech Show reaches 750.
- 3 new research-intensive businesses locations and/or expansions





# Maine will foster growth in research intensive companies to become world-class enterprises through a comprehensive network of services and support.

#### **2010 OUTCOME:**

Maine reaches the top 25 on CFED report card for:

- venture capital investments;
- Small Business Investment Corporation (SBIC) financing;
- loans to small businesses;
- employment growth;
- job growth due to new businesses;
- technology industry employment; and
- change in new companies

#### **2007 BENCHMARKS:**

- Maine's funding continuum will include an investment fund designed to provide working capital for early stage research-intensive companies.
- A network of 10 experienced entrepreneurs actively participate in offering advice, time and guidance to Maine's research-intensive companies.
- DECD has business support personnel and services dedicated to and knowledgeable about research-intensive ventures.



#### SUMMARY

#### Four critical factors

- Increase investments our current proven investments
- Expand higher education to increase our knowledge based work force
- Recruit and grow mid to large size innovation driven companies
- Innovate or Die in all sectors of the economy

## Challenge for this millennium

Our economy has changed permanently.
Our success depends on:

- o Innovation
- o Learning
- o Constant adaptation
- o Telling our Story

The full plan is available at: www.maineinnovation.com

